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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/422,593	10/21/1999	LEONARD CORNING LAHEY	B09-99-028	5731

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EXAMINER	
BOYCE, ANDRE D	

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/422,593	LAHEY ET AL.	
	Examiner	Art Unit	
	Andre Boyce	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-13,16-26 and 29-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,4,6-10,12,13,16,17,19-23,25,26,29,30,32-36,38 and 39* is/are rejected.

7)☒ Claim(s) *5,11,18,24,31 and 37* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/19/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on November 19, 2004 has been entered.

2. Claims 1, 2, 14, 15, 27, and 28 have been canceled. Claims 3-13, 16-26, and 29-39 are pending.

35 USC § 101

3. Applicant's claims are deemed to be statutory and fall within the technological arts, since independent claims 3, 7, 10, and 12 include, inter alia, generating a customer record and generating output material, both of which are done in a computer network environment, as seen in figure 1. The customer record is generated via data input computer 4, wherein the output material is generated via output constructor 10. Further, as seen in Applicant's specification, each worker is defined as a self-contained application program that performs a specific piece of work (page 18, lines 11-13).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3, 4, 6-10, 12, 13, 16, 17, 19-23, 25, 26, 29, 30, 32-36, 38, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stuart (USPN 6466935) in view of Goertz et al (USPN 6173295).

As per claim 3, Stuart discloses a workflow management method for creating and delivering output material (workflow management systems 100 and 200 for process control in production printing, figures 1 and 2), comprising generating a customer record (i.e., record created in the job table for the customer, column 6, lines 37-41), adding a job record including a status field to a job status table for the customer record (table 600, including a status attribute, figure 6), setting the added job record status to a first status (i.e., ready for printing), processing a selected job in the job status table (i.e., identifies jobs that have the right step in the process by specifying the status, column 10, lines 63-64), invoking a first worker if the selected job has a first status, generating, with the first worker, output material from processing the product and customer preference fields in the c ustomer record for the selected job (i.e., print job workflow manager schedules itself and prints the job, column 11, lines 3-6) by,

processing a template including queries of records in the database table, accessing at least one value in a field in one customer record to include in a query against the database table, and applying the query against the database table to determine a record associated with a file including fields matching the query (print job workflow manager uses a query to retrieve jobs that have a status of ready for printing, column 11, lines 25-28), accessing at least one content file associated with the determined record, and generating the content from the at least one accessed content file into the template, which forms the output material (i.e., worker accesses attributes from the print manager, including file name 322, file size 326, and file format 327, column 8, lines 17-32),

setting the status for the selected job in the job status table to a second status after generating the output material with the first worker (i.e., composition workflow manager 222 monitors the status of each step and updates the job status, column 6, lines 51-56), invoking a second worker if the selected job has the second status, determining, with the second worker, a selected one of a plurality of delivery options from the customer record for the selected job, and transmitting, with the second worker, the output material via the determined delivery option to the customer specified in the customer record (job scheduler workflow manager 224 sends the job to the printer, monitors the printing process, records and reports on print job status during printing, column 6, lines 64-67).

Stuart does not explicitly disclose a customer record to include fields specifying at least one product, customer preferences, and a selected delivery option indicating

a method to deliver generated output material on the product specified in the customer record. Goertz et al disclose a job ticket 40, including attribute record 42 that contains identification information, such as customer name and document records 44 and 46, which include all the information needed to print a document included in the print job (column 5, lines 48-56). Both Stuart and Goertz et al are both concerned with the efficient output of printed materials, and Goertz et al creation of the job ticket would be used an input for the Stuart WFMS, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the job ticket information in Goertz et al, as input into the WFMS of Stuart, thereby making the Stuart system more flexible to the customer.

As per claim 4, Stuart discloses the first status associated with the first worker and the second status associated with the second worker, wherein the first and second workers further perform querying the job status table to access all jobs having the status associated with the worker (i.e., table 600 contains jobs for more than one workflow manager, and the managers are only interested in selecting jobs with their status (column 10, lines 60-64), wherein the SQL query is used to retrieve jobs that have the particular worker status, column 11, lines 25-28).

As per claim 6, Stuart discloses wherein the job status table is processed by a supervisor program, that polls the job status table at predetermined intervals (WFMS 100 polls the tables, column 4, lines 41-42), performs the steps of invoking the first and second workers, and processes every record in the job status table when

performing the polling operation (i.e., WFMS 100 processes the work item and updates attributes in the table, including status to indicate a job being processed, column 4, lines 49-55).

Claim 7 is rejected based upon the rejection of claim 1, as containing similar limitations. In addition, Stuart discloses providing a worker transition table including a plurality of records (table 600, including one row for each job, figure 6), each indicating an input worker, a completion state, an output worker and output state (table 600 containing jobs for more than one worker, column 10, lines 60-61), wherein the input worker indicates the worker assigned to process the job, the completion state is a status indicated for the job after the input worker processes the job, the output worker is the worker that processes the job after the input worker and resulting in the completion state, and the output state is the state to which the job status is set, and wherein the job status table further indicates a current worker assigned to process the job (i.e., the workflow manager is only interested in selecting jobs that are ready for the particular process, column 10, lines 60-62),

setting the status for the selected job to a second status after generating the output material with the first worker, wherein setting the status comprises determining from the worker transition table one record having an input worker and completion state matching the current worker and job status, respectively, and setting the status to the output state and the current worker to the output worker (i.e., composition workflow manager 222 would monitor the status of each step within table 600 and updates the job status, column 6, lines 51-56).

As per claim 8, Stuart discloses invoking the output worker after setting the job status to the output status (job scheduler work flow manager 224, column 6, lines 64-67).

As per claim 9, Stuart discloses the worker that completed processing the job, setting the completion status to a state indicating an outcome of processing the job (i.e. after the job is printed, the job status is updated to make the job ready for subsequent processing, column 7, lines 2-4).

Claim 10 is rejected based upon the rejection of claim 1, as containing similar limitations. In addition, Stuart discloses setting the status to a third status after adding the job in the job status table (i.e., workflow managers update the status), invoking a data conditioning worker in response to setting the job status for the selected job to the third status, processing with the data conditioning worker, the customer record to determine whether at least one value satisfies at least one condition, taking corrective actions with the data conditioning worker, if the data in the customer record does not satisfy each condition, and setting the status of the selected job to the first status if the data in the customer record satisfies each condition (e.g., reprint workflow manger, wherein it creates a reprint job containing pieces that need to be reprinted, thereby taking corrective actions, if the data in the customer record does not satisfy each condition, column 7, lines 9-13).

Claim 12 is rejected based upon the rejection of claim 1, as containing similar limitations. In addition, Stuart discloses generating information on the output material, setting the status for the selected job to a third status (i.e., after the job is

printed, the job scheduler workflow manager updates the job status to make the job ready for subsequent processing, column 7, lines 1-4). Stuart does not explicitly disclose invoking an accounting worker, the generated information on the output material to determine costs of generating the output material, and generating, with the accounting worker, an invoice including the determined costs of the output material. However, Stuart discloses that the WFMS may include additional workflow manager components (column 6, lines 17-20). Further, Stuart discloses reducing the cost per finished piece (column 1, lines 58-61). As a result, the cost of the output material must be calculated in some manner, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an accounting worker in Stuart, in order to calculate the cost of the output material, thus making the WFMS more robust.

As per claim 13, Stuart discloses multiple workers each associated with one input status and at least one output status, wherein the status of the job is updated to one associated output status after one worker completes processing the job, wherein the output status for one worker is the input status associated with one other worker and wherein the definition of input and output statuses for workers defines the workflow of the job (i.e., workflow managers 121-123 represent event driven software that uses its input state to drive its processing and produce an output state, wherein the workflow manager polls or queries an input condition, column 3, lines 54-60.

Claims 16, 17, 19-23, 25, and 26 are rejected based upon the rejection of claims 3, 4, 6-10, 12, and 13, respectively, since they are the system claims corresponding to the method claims.

Claims 29, 30, 32-36, 38, and 39 are rejected based upon the rejection of claims 3, 4, 6-10, 12, and 13, respectively, since they are the article of manufacture claims corresponding to the method claims.

Allowable Subject Matter

6. Claims 5, 11, 18, 24, 31, and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Neilsen (USPN 6639687) disclose a progress indicator generated on a computer display.

-Lahey et al (USPN 6239802) disclose enabling a user to create a new file similar to a pre-existing file

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (703) 305-1867. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adb
February 18, 2005

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